

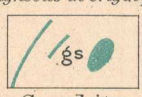
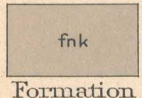
AREAL GEOLOGY

STATE OF NEW JERSEY

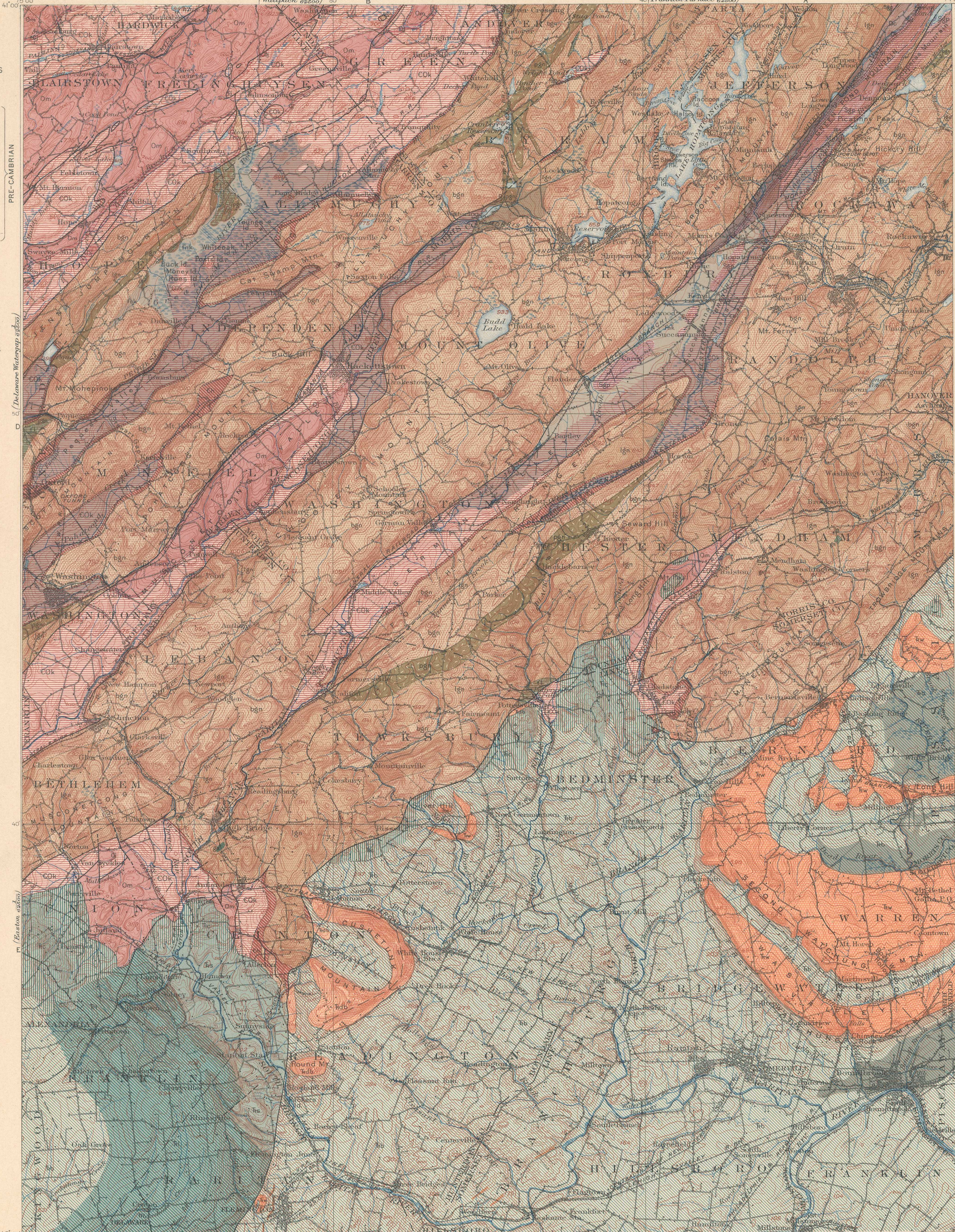
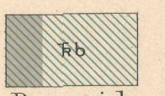
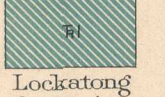
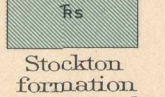
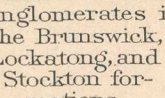
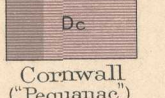
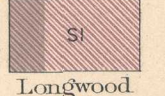
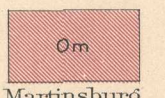
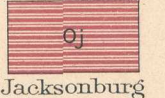
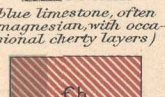
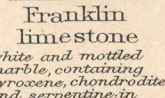
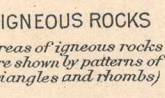
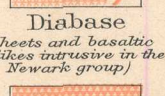
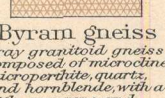
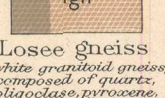
HENRY B. KÜMMEL STATE GEOLOGIST

NEW JERSEY
RARITAN QUADRANGLE

LEGEND

LEGEND
(continued)METAMORPHIC ROCKS
OF UNKNOWN ORIGIN
(Areas of metamorphic
rocks of unknown origin
are shown by hachures)Pochnick
gneiss
(dark gneiss com-
posed of pyroxene,
hornblende, oligoclase,
and magnetite, partly
igneous in origin)Graphite
schist
(including garnetiferous
graphite schist and mica-
graphite schist)Formation
not known
(deeply covered
by drift)Note: In areas deeply
covered by drift the
patterns are subdued
by an overprinted color
and the boundaries are
dotted. The Quaternary
deposits are represented
on the surficial geology
map.

Faults

Concealed faults
(covered by younger
deposits)SEDIMENTARY ROCKS
(Areas of subaqueous
deposits are shown by
patterns of parallel lines,
metamorphism is
indicated by hachures
combined with the line
patterns)Brunswick
shale
(soft red shale with few
beds of sandstone)Lockatong
formation
(dark argillite and
fine-grained silty
sandstone)Stockton
formation
(gray sandstone, argillite,
and shale)Conglomerates in
the Brunswick,
Lockatong, and
Stockton
formationsCornwall
(Pegumac)
shale
(black argillite shale
and slate)Kanouse
sandstone
(light-colored sandstone,
or quartzite)Decker
limestone
(dark gray impure
limestone)Longwood
shale
(red shale)Green Pond
conglomerate
(conglomerate and
quartzite)Martinsburg
shale
(shale, slate, and
sandstone)Jacksonburg
limestone
(dark blue or black mas-
sive and shaly limestone,
with conglomerate at
base)Kittatinny
limestone
(blue limestone, often
massive, with con-
siderable cherty layers)Hardyston
quartzite
(vitreous, ferruginous,
colorless quartzite,
in part foliated)Franklin
limestone
(white and mottled
marble, containing
pyroxene, hornblende,
and serpentine, in
places including silty
rocks resembling
shales, volcanics)Igneous rocks
(Areas of igneous rocks
are shown by patterns of
triangles and rhombs)Diabase
(sheets and basaltic
dikes, common in the
Newark group)Watchung
basalt
(three successive lava
flows interbedded in
the Brunswick shale)Byram gneiss
(gray granitoid gneiss
composed of quartz,
microcline, pyroxene,
and hornblende with
a little pyroxene and
biotite)Loeess gneiss
(white granitoid gneiss
composed of quartz,
oligoclase, pyroxene,
and some hornblende
and biotite)Loeess gneiss
(white granitoid gneiss
composed of quartz,
oligoclase, pyroxene,
and some hornblende
and biotite)Legend is continued
on the left margin.

Henry Gannett, Chief Topographer;
George H. Cook, Geographer in charge;
Triangulation by U.S. Coast and Geodetic Survey and C.C. Vermeule;
Topography by Geological Survey of New Jersey;
Surveyed in 1881-86.
Revised in 1903 under the direction of H.M. Wilson, Geographer,
and Hersey Munroe, Topographer in charge; by Robert Coe,
J.M. Whitman, Jr., J.J. Gayetty, A.T. Fowler,
B.B. Alexander, Ira M. Flocker, and J.P. Gardner.

Scale 1:25,000
Miles
Kilometers
Contour interval 20 feet.
Datum is mean sea level.
Edition of Nov. 1911.

Pre-Cambrian geology by W.S. Bayley.
Paleozoic geology by H.B. Kümmel and Stuart Weller.
Triassic geology by H.B. Kümmel.
Surveyed in 1895 to 1909.
SURVEYED IN COOPERATION WITH THE STATE OF NEW JERSEY.